

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (CURRENTLY AMENDED) A method of obtaining printed instances of a document, the method comprising:

distributing copies of electronic document data to document processors via a non-transitory medium, the electronic document data containing printing instructions for printing each instance from a respective one of the document processors;

including a definition of a user data input field in the electronic document data, for receiving a user defined string of characters entered in said field;

including an embedded control program ~~of~~ with processing instructions embedded in the electronic document data, the embedded control program with processing instructions being linked to the user data input field, the embedded control program with processing instructions being distributed in the copies of the electronic document data, the embedded control program ~~of~~ with processing instructions comprising:

instructions ~~to cause~~ instructing a processor to receive the user defined string of characters from the user data input field, instructions to control processing by the processor of the user defined string, instructions to derive a series of codewords from the characters in the user defined string from the linked user data input field, ~~the instructions of~~ the embedded control program with processing instructions using the derived

codewords to instruct the processor to generate commands to print geometrical elements of a bar code, the geometrical elements representing each codeword as a respective configuration of printed geometrical elements and their background in a respective area of the bar code.

2. (CURRENTLY AMENDED) A method according to Claim 1, wherein the embedded control program with processing instructions ~~is~~ are arranged to make at least one of the configurations dependent on a further factor other than the codeword represented by the configuration that will be decoded upon decoding the barcode.
3. (CURRENTLY AMENDED) A method according to Claim 1, wherein the embedded control program with processing instructions ~~make~~ makes the configurations dependent on the specific area in which the codeword is represented, so that mutually different configurations will result from representing a specific codeword dependent on whether the specific codeword is represented in one region or another.
4. (CURRENTLY AMENDED) A method as claimed in Claim 3, wherein the embedded control program with processing instructions ~~is~~ are arranged to control printing of the barcode as a two dimensional barcode, at least part of the areas having mutually different shapes, the embedded control program with processing instructions adapting the commands to print the elements of the configuration that is used to represent a codeword according to the shape of the area in which the codeword is represented.
5. (CURRENTLY AMENDED) A method as claimed in Claim 3, wherein the embedded control program with processing instructions ~~is~~ are arranged to include additional information in the areas, the additional information being independent of the codewords represented in the areas, the additional information being included by adding geometrical elements, removing geometrical elements and/or modifying visual properties of part of the geometrical elements that

represent at least one of the codewords, dependent on the area in which the codeword is represented in a way that does not affect a decoded result when the barcode is decoded after scanning.

6. (CURRENTLY AMENDED) A method as claimed in Claim 4, wherein the embedded control program with processing instructions ~~is~~ are arranged to print additional geometrical elements that extend from within a region that is defined by all geometrical elements that will be used to decode the barcode in the printed document, to outside said region among further printed items of the document, so that the additional geometrical elements do not affect a decoded result when the barcode is scanned and decoded.

7. (CURRENTLY AMENDED) A method as claimed in Claim 4, wherein the geometrical elements each have a property that does not affect the decoded data, the embedded control program with processing instructions being arranged to set said property in different ones of the geometrical elements in at least one area that represents a codeword differently during printing.

8. (CURRENTLY AMENDED) A method as claimed in Claim 7, wherein the embedded control program with processing instructions ~~is~~ are arranged to select a color and/or grey level density of different geometrical elements differently, as a predetermined function of position in an area where the barcode is printed.

9. (CURRENTLY AMENDED) A electronic document processor, comprising a user data input device and a connection for a printer, the electronic document processor having a non-transitory loaded electronic form that contains a definition of a user data entry field for receiving a string of input characters from a user, the processor being arranged to extract and execute an embedded control program ~~of~~ with instructions that the processor receives embedded in the document, the embedded control program being linked to the user data input field, instructions of the embedded control program instructing the processor to process ~~being configured to cause the~~

~~processor to derive~~ a series of codewords from the string and to generate commands to print geometrical elements of a bar code in electronic document data, dependent on the derived codewords, the instructions causing the processor to represent as a configuration of printed geometrical elements and their background in a respective area of the bar code.

10. (CURRENTLY AMENDED) An electronic document processor as claimed in Claim 9, wherein the embedded control program with instructions ~~is are~~ arranged to make at least one of the configurations dependent on a further factor other than the codeword represented by the configuration that will be decoded upon decoding the barcode.

11. (CURRENTLY AMENDED) An electronic document processor as claimed in Claim 9, wherein the embedded control program with instructions ~~make~~ makes the configurations dependent on the specific area in which the codeword is represented, so that mutually different configurations will result to represent a specific codeword dependent on whether the specific codeword is represented in one region or another.

12. (CURRENTLY AMENDED) An electronic document processor as claimed in Claim 11, wherein the embedded control program with instructions ~~is are~~ arranged to control printing of the barcode as a two dimensional barcode, at least part of the areas having mutually different shapes, the embedded control program with instructions adapting the commands to print the elements of the configuration that is used to represent a codeword according to the shape of the area in which the codeword is represented.

13. (CURRENTLY AMENDED) An electronic document processor as claimed in Claim 11, wherein the embedded control program with instructions ~~is are~~ arranged to include additional information in the areas, the additional information being independent of the codeword represented in the areas, the additional information being included by adding geometrical elements, removing geometrical elements and/or modifying visual properties of part of the

geometrical elements that represent at least one of the codewords, dependent on the area in which the codeword is represented in a way that does not affect a decoded result when the barcode is scanned and decoded.

14. (CURRENTLY AMENDED) An electronic document processor as claimed in Claim 13, wherein the embedded control program with instructions ~~is~~ are arranged to print additional geometrical elements that extend from within a region that is defined by all geometrical elements that will be used to decode the barcode in the printed document, to outside said region among further printed items of the document, so that the additional geometrical elements do not affect a decoded result when the barcode is scanned and decoded.

15. (CURRENTLY AMENDED) An electronic document processor as claimed in Claim 13, wherein the geometrical elements each have a property that does not affect the decoded data, the embedded control program with instructions being arranged to set said property in different ones of the geometrical elements in at least one area that represents a codeword differently during printing.

16. (CURRENTLY AMENDED) An electronic document processor as claimed in Claim 15, wherein the embedded control program with instructions ~~is~~ are arranged to select a color and/or grey level density of different geometrical elements differently, as a predetermined function of position in an area where the barcode is printed.

17. (CURRENTLY AMENDED) ~~An~~ A non-transitory electronic form stored on a computer that contains a definition of a user data entry field for receiving a string of input characters from a user and an embedded control program with instructions embedded in the electronic form and linked to the user data input field, wherein ~~instructions of the embedded~~ control program with instructions ~~is~~ are configured to instruct the computer to process ~~cause a processor to derive~~ a series of codewords from the characters in the string and generate commands to print geometrical

elements of a bar code in electronic document data, dependent on the codewords, representing each codeword as a configuration of printed geometrical elements and their background in a respective area of the bar code.

18. (CURRENTLY AMENDED) An electronic form according to Claim 17, wherein the embedded control program with instructions ~~is~~ are arranged to make at least one of the configurations dependent on a further factor other than the codeword represented by the configuration that will be decoded upon decoding the barcode.

19. (CURRENTLY AMENDED) An electronic form according to Claim 17, wherein the embedded control program with instructions ~~make~~ makes the configurations dependent on the specific area in which the codeword is represented, so that mutually different configurations will result from representing a specific codeword dependent on whether the specific codeword is represented in one region or another.

20. (CURRENTLY AMENDED) An electronic form as claimed in Claim 19, wherein the embedded control program with instructions ~~is~~ are arranged to control printing of the barcode as a two dimensional barcode, at least part of the areas having mutually different shapes, the embedded instructions adapting the commands to print the elements of the configuration that is used to represent a codeword according to the shape of the area in which the codeword is represented.

21. (CURRENTLY AMENDED) An electronic form as claimed in Claim 19, wherein the embedded control program with instructions ~~is~~ are arranged to include additional information in the areas, the additional information being independent of the codewords that are represented in the areas, the additional information being included by adding geometrical elements, removing geometrical elements and/or modifying visual properties of part of the geometrical elements that represent at least one of the codewords, dependent on the area in which the codeword is

represented in a way that does not affect a decoded result when the barcode is scanned and decoded.

22. (CURRENTLY AMENDED) An electronic form as claimed in Claim 21, wherein the embedded control program with instructions is ~~are~~ arranged to instruct printing ~~print~~ additional geometrical elements that extend from within a region that is defined by all geometrical elements that will be used to decode the in the printed document, to outside said region among further printed items of the document, so that the additional geometrical elements do not affect a decoded result when the document is scanned and decoded.

23. (CURRENTLY AMENDED) An electronic form as claimed in Claim 21, wherein the geometrical elements each have a property that does not affect the decoded data, the embedded control program with instructions being arranged to set said property in different ones of the geometrical elements in at least one area that represents a codeword differently during printing.

24. (CURRENTLY AMENDED) An electronic form as claimed in Claim 23, wherein the embedded control program with instructions is ~~are~~ arranged to select a color and/or grey level density of different geometrical elements differently, as a predetermined function of position in an area where the barcode is printed.

25. (PREVIOUSLY PRESENTED) A machine readable medium, comprising an electronic form stored on a computer according to Claim 17.

26. (CURRENTLY AMENDED) A method of authoring ~~an~~ a non-transitory electronic document, the method comprising:

including a definition of a field for entering a string of characters in the document;

providing software building blocks for building a control program ~~of~~ with instructions embedded in the electronic document, the embedded control program ~~of~~ with instructions being configured to cause a processor to receive and ~~process~~ control processing of the string of characters from said field to transform the characters into commands to print geometrical elements of a bar code in electronic document data, so that the generated bar code is decodable according to a predetermined standard;

assembling the building blocks into the electronic document during authoring of the document, while adapting the embedded control program ~~of~~ with instructions to make a visual aspect of the bar codes generated under control of the embedded control program with instructions specific to the document and/or the field, without affecting a result of decoding the bar code;

distributing copies of the electronic document with the embedded control program ~~of~~ with instructions for receiving and processing the string of characters under control of the embedded control program after distribution.

27. (CURRENTLY AMENDED) A document authoring machine, for generating ~~an~~ a non-transitory electronic document that includes a user input field for entering a string of characters and an embedded control program ~~of~~ with instructions embedded in the electronic document and linked to the user input field, wherein the embedded control program ~~of~~ with instructions is configured to cause a processor to receive and process the string of characters and to generate commands to print geometrical elements of a bar code, the machine comprising software building blocks for building the embedded control program ~~of~~ with instructions so that the generated bar code is decodable according to a predetermined standard, and an editor for assembling the building blocks when the document is authored, the editor providing for adaption

of the embedded control program ~~of~~ with instructions to make a visual aspect of the bar codes generated under control of the embedded control program ~~of~~ with instructions specific to the document and/or the user input field, without affecting a result of decoding the bar code.